## Mount Athos: Levels of Literacy

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Mount Athos has always been seen as a meeting place for monks from all over the Christian—later only the Orthodox—world. Today we would call it an international center, but this concept is definitely alien to the medieval way of thinking, which was dominated by the imperial ideal. It is true that the vast majority of Athonite monks during the Middle Ages were Greek speaking and came from all parts of the Byzantine Empire. But of course no one would have excluded non-Greek-speaking monks from the monastic community, so long as they were not heretics.<sup>1</sup>

Already in the tenth century Athonite monks came from all strata of society. St. Athanasios, the founder of Lavra, born in Trebizond, was a former professor from Constantinople and had contacts at the imperial court. The founders of the Iviron monastery had similar—even better—imperial contacts and social position, not to mention St. Paul of Xeropotamou and, later, the founders of monasteries such as Docheiariou, Chilandari,

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<sup>1</sup>Abbreviations: Chilandar: Actes de Chilandar, pub. by L. Petit and B. Korablev, VizVrem 17 (1911), Priloženie 1; Dionysiou: Actes de Dionysiou, ed. N. Oikonomides (Paris, 1968); Docheiariou: Actes de Docheiariou, ed. N. Oikonomides (Paris, 1984); Esphigmenou: Actes d'Esphigmenou, ed. J. Lefort (Paris, 1973); Iviron: Actes d'Iviron, I, ed. J. Lefort, N. Oikonomides, Denise Papachryssanthou (Paris, 1985); Kastamonitou: Actes de Kastamonitou, ed. N. Oikonomides (Paris, 1978); Kutlumus: Actes de Kutlumus, ed. P. Lemerle (Paris, 1945); Laura I-IV: Actes de Laura, 4 vols., ed. P. Lemerle, N. Svoronos, A. Guillou, Denise Papachryssanthou (Paris, 1970-82); Mošin-Sovre: V. Mošin and A. Śovre, Supplementa ad acta graeca Chilandarii (Ljubljana, 1948); Panteleemôn: Actes de Saint-Pantéléèmôn, ed. P. Lemerle and G. Dagron (Paris, 1982); Pantocrator: Actes du Pantocrator, pub. by L. Petit, VizVrem 10 (1903), Priloženie 2; Philothée: Actes de Philothée, pub. by W. Regel, E. Kurtz, B. Korablev, VizVrem 20 (1913), Priloženie 1; Prôtaton: Actes du Prôtaton, ed. Denise Papachryssanthou (Paris, 1975); Schatzkammern: F. Dölger, Aus den Schatzkammern des heiligen Berges (Munich, 1948); Xénophon: Actes de Xénophon, ed. Denise Papachryssanthou (Paris, 1986); Xéropotamou: Actes de Xéropotamou, ed. J. Bompaire (Paris, 1964); Zographou: Actes de Zographou, pub. by W. Regel, E. Kurtz, B. Korablev, VizVrem 13 (1907), Priloženie 1.

Dionysiou, etc. On the other hand, all the sources (starting with the biographies of the main "stars" of the monastic community, its saints<sup>2</sup>) constantly mention the average rustic monks whose lack of education was notorious and who constituted a very large part of the inhabitants of the peninsula. Educated or not, all monks were engaged in the pursuit of the spiritual life and prayed in several ways, none of which was directly related to-or dependent on—a high level of culture. Mount Athos never pretended to be an elitist social or cultural center. Consequently, the educational level of its inhabitants varied over time in proportion to the general cultural level, in a society where basic schooling was mainly the job of laymen or of the secular clergy. Faith and the desire to punish the flesh by living a hard life either as an anchorite of the desert or as a regular monk in a koinobion (sometimes alternating between one lifestyle and the other) were the main ideals that attracted the Athonites. In spite of its peculiarities, less pronounced in the Middle Ages than today, Mount Athos (as well as other, less well known monastic communities, such as those of Bithynian Olympus or of Mount Latros) may be seen as a microcosm of the Byzantine Empire—and of what has been called the Byzantine "commonwealth"—especially if one is interested in the monks' level of general culture and of literacy. Consequently, what I will propose, on the basis of Athonite documents, could be considered as somehow valid for the empire as a whole, provided that one keeps in mind that we have here a monastic community, in principle expected to have a higher—but not much higher—level of literacy than that of contemporary laymen. It would also be valid for the other groups that considered Athos their spiritual center

<sup>2</sup>Athonite saints' lives provide valuable information on the milieu in which they were written. Cf. A. Laiou Thomadakis, "Saints and Society in the Late Byzantine Empire," in *Charanis Studies* (New Brunswick, N.J., 1980), 84–114.

and who had their own institutions there—the Georgians, Bulgarians, Serbs, Russians, Vlachs, etc. Mount Athos was a pole of attraction for all of them. In what follows I will focus on only one of the languages that were spoken on the mountain, Greek.

I am concerned with the level of literacy, not culture and higher learning. I do not by any means intend to enumerate here the highbrow authors who lived on Athos and wrote on theology or other subjects. Nor will I mention popular writers or ecclesiastical poets. The discussion will be based only on the autograph signatures that survive at the bottom of the extant acts of the Athonite administration from the tenth to the fifteenth century. Thus the present study, although limited to Mount Athos, can also be seen as a trial balloon: I shall try to demonstrate a way of using the Greek archival documents of the Middle Ages to study the level of literacy and its evolution throughout the provinces and the centuries. In spite of its obvious importance for the overall image of a country or region, this middle- and low-level culture is not studied and is poorly known because of the lack of relevant documentation.

This problem of Byzantine literacy has been addressed in a very provocative study by Robert Browning. He has shown that, contrary to what happened in Western Europe<sup>3</sup> and to what was believed to have been the case for the eastern empire, the number of people with access to literacy—functional literacy, not high-level education—was significant in Byzantium, especially in cities and monasteries.<sup>4</sup> Browning approached the question as a whole, taking into account manuscripts, documents, lives of saints, etc. He suggested that the educational level must have changed from time to time and that in any given period one should look for uneven levels of literacy, for a spectrum ranging from a man "who could painfully read . . . to

<sup>3</sup>The extremely low educational level of Western Europe in the Middle Ages has been outlined recently by A. Wendehorst, "Wer konnte im Mittelalter lesen und schreiben?" in Schulen und Studium im sozialen Wandel des hohen und späten Mittelalters, ed. J. Fried (Sigmaringen, 1986), 9–33. In contrast, a rather optimistic evaluation of literacy in late medieval Bulgaria is expressed by V. Gjuzelev, "Bildungsstand in Bulgarien während des Hochmittelalters (13.–14. Jh.)," Miscellanea bulgarica 3: Forschungen zur Geschichte Bulgariens im Mittelalter (Vienna, 1986). I am indebted to Prof. P. Malingoudis of Thessaloniki for these two references.

<sup>4</sup>R. Browning, "Literacy in the Byzantine World," *BMGS* 4 (1978), 39–54. Yet many completely illiterate *higoumenoi* were to be found in 6th-century Byzantium; see P. Merkelbach, "Analphabetische Klostervorsteher in Konstantinopel und Chalkedon," *ZPE* 39 (1980), 291–94.

the man who was fully at home in . . . the Atticist hochsprache."<sup>5</sup> It is this evolution in level and over time that I will discuss here.

Very early on, Mount Athos acquired a central administrative seat at Karyes, a small town that is still the "capital" of the monastic peninsula.6 At the head of this administration was the protos (attested as early as 908), who exercised some control over the mountain and the monasteries (including the larger ones) and who represented Athos as a whole vis-à-vis the lay authorities. Initially he was appointed for very long periods of time (practically for life); later the *protos* was given yearly mandates. He was assisted by a council of monks, of good reputation, usually called the gerontes (elders), who deliberated under his presidency and who decided various issues by consensus rather than by vote. These gerontes represented individual monastic institutions, the major monasteries as well as the smaller ones that abounded around the monastic capital. Usually (but not always) one representative came from each monastery, irrespective of its size and population. Three major statutory meetings took place every year, coinciding with the feasts of Christmas, Easter, and the Dormition of the Virgin (15 August). On these occasions, on which representatives (often the higoumenoi themselves) of all monasteries were expected, major decisions were made. Between these meetings, the protos governed together with the higoumenoi of the small monasteries that surrounded Karyes as well as with the permanent representatives that the major monasteries kept in the town.

Needless to say, during the six centuries that we are concerned with, the distribution of power varied considerably over time, depending mainly on the personality and prestige of the protos. In any case, the decisions of the central council of Karyes were normally written down, and the original document was signed by the protos and by the representatives of the monasteries, following roughly an order of precedence that seems to depend on the importance of their monasteries. These documents, with their mostly autograph signatures, are preserved in the Athonite archives; many have been published according to the diplomatic method, reproducing their mistakes. Moreover, these editions are accompanied by photographs that allow one to check the readings and to see the

<sup>&</sup>lt;sup>5</sup>Browning, "Literacy," 51.

<sup>&</sup>lt;sup>6</sup>The Athonite institutions have been thoroughly studied by Denise Papachryssanthou, *Prôtaton*.

handwritings, which sometimes reveal the level of culture of the signatories. The present study is based on these transcriptions and published photographs. For the unpublished documents, or those that are not yet available in modern diplomatic editions, I have used photographs from the collection at the Centre de Recherche en Histoire et Civilisation de Byzance, Collège de France.

One may assume that the members of this council were not average monks. Even those who were not themselves *higoumenoi*, but were delegates of the abbots, were selected according to some criteria. Apart from respectability, good judgment, etc., literacy was presumably an important criterion. But persons who combined all these qualities were not always available in the monasteries, especially the smaller ones; thus there were some illiterate representatives. Moreover, as we shall see, the level of literacy of these monks was not necessarily higher than that of their fellow monks in each monastery, at least of the group of monks that constituted the elite (*gerontes*) that surrounded the *higoumenos*.

I have now described the kind of documents that will serve as my main source: acts of the council of Karyes, signed by many representatives from several monasteries, published or unpublished, as many as I could examine. I will eventually compare them to the few preserved documents signed by a large number of monks from the same monastery, documents that contain lists of the monastery's elite. I have excluded from this survey all acts that are not original (the intervention of a copyist may radically change the signatures, especially their spelling); I have also excluded all acts whose authenticity and date are not assured; and, finally, I have excluded, at times arbitrarily, documents in which many signatures seem to have been written by the same person.

How does one evaluate the degree of literacy of a document's signatories? The signatures of medieval witnesses tend to be lengthy; the witness usually gives his name and rank or occupation and summarizes in a few words the deed that he is witnessing to. The purpose of all this was to prove that he was aware of the whole affair so that he would be able to testify if a dispute ever arose. The main function of the signature being to provide the elements of identification—and not by any means to serve as a personalized sign, as it does today—witnesses had to write one or more lines. For notarial deeds, the imperial legislation of the late ninth century, aware of the difficulty of finding

literate people in the countryside, had to take special measures: for example, a will had to be signed by five witnesses in town, but only by three in rural areas; and, most important, these witnesses could be illiterate "provided that their way of life showed that they were reliable (τὸ ἀξιόπιστον)," that is, those who were priests, archontes, military men, public servants, rich or with well-paying jobs, or who were known to be pious and to respect the established order. Note that literate witnesses were assumed to be available everywhere, but there was doubt as to their number.

When examining the signatures on a document one looks first for the case of illiterate individuals who had their names written by someone else. These persons either drew a signon, that is, a cross in the quarters of which the scribe wrote their name (such signa are very rare in the documents of the council of Karyes); or had a complete signature written by someone else with a formula saying that this is the signature of so-and-so, who drew the cross at the beginning but whose name and testimony were written by the hand of so-andso. With signatures of the latter type it is almost certain that the witnesses were illiterate, although it is conceivable—and indeed attested in some rare cases—that a man might choose to have someone else sign his name.8 The case of the signon is less secure: we find "autograph" signa, undoubtedly preferred by individuals who thought that this was a more binding way of assuming an obligation. We also have documents in which one and the same person, who was obviously literate, wrote his signon at the beginning of the document and his full autograph signature at the end.9

There are relatively few cases of this kind. For the others, who knew how to write, there is one main criterion of literacy—their spelling. As their signatures are autograph—unless otherwise stated—their spelling, especially if studied in a sta-

<sup>&</sup>lt;sup>7</sup>See novella 43 of Leo VI; cf. Justinian's novellae 10.1 and '3.

<sup>&</sup>lt;sup>8</sup>For example, *Chilandar*, no. 9; there are two originals, preserved in the monastery because the small chapel that constituted the other party in the 13th century was later absorbed (together with its archives) by Chilandar. In one of the originals all signatures seem to be autograph. In the other there is an entire group that has been written by the same hand, even though the signatories knew how to write, most probably because some of them were absent when the second original was ready for signing.

<sup>&</sup>lt;sup>9</sup>This is the case of *Lavra* II, no. 78. The same observation, i.e., that not all those signing with a simple cross were necessarily illiterate, has been made in West European diplomatics: cf. Wendehorst, op. cit., 21.

tistical manner, is an important indicator of how well they had learned written Greek during their primary and secondary education. I shall return to this point later.<sup>10</sup>

Handwriting could be another indicator. In the period that we are concerned with, the exclusive use of capital letters indicates an ecclesiastical, "non-lay," milieu and a certain "catechetic" value, as G. Cavallo has shown with the study of manuscripts up to the eleventh century;11 but it also shows a low cultural level—a person who most probably never went beyond the primary grammatistes. 12 These two explanations of the use of capital letters only are not by any means contradictory, if one recalls the practical, non-elitist, spirit that prevailed in the ecclesiastical milieu (cf., for example, the simple language used in the liturgy and in the lives of saints) and realizes that, if a capital script was used for Bible manuscripts through the eleventh century, it was in order to make the scriptures available to all readers, whatever their level of education. Be that as it may, on Athonite documents, the signatures in capital letters, which are still quite common in the tenth century but tend to disappear after the end of the eleventh, 13 contain a large number of spelling errors. But as there are also persons who made many such mistakes although they wrote a very sophisticated minuscule script<sup>14</sup>—obviously persons trained as professional scribes or notaries but who did not receive extensive schooling in classics<sup>15</sup>—I am obliged to

<sup>10</sup>One finds cases of persons who spell their signatures differently at different times. In my opinion this demonstrates nothing more than some uncertainty. Cf. below, note 36.

<sup>11</sup>G. Cavallo, "Funzione e strutture della maiuscola greca tra i secoli VIII-XI," *La paléographie grecque et byzantine*, CNRS (Paris, 1977), 95-137.

12 Cf. Browning, "Literacy," 51; see also A. Karpozilos, Συμβολή στη μελέτη του βίου καὶ του ἔργου του 'Ιωάννη Μαυρόποδος (Ioaninna, 1982), 85. For similar remarks on the use of the cursive script in Western Europe, see Wendehorst, op. cit., 32.

<sup>13</sup> In archival documents capital signatures become extremely rare after 1081. Similar observations have been made by Cyril Mango on the basis of the Parthenon grafitti, in which the minuscule script appears in the 11th century and prevails in the 12th; C. Mango, "L'origine de la minuscule," *La paléographie*, 176–77.

<sup>14</sup> For example, the famous *tragos* of John Tzimiskes, written in 972 and preserved in the archives of the Protaton (*Prôtaton*, no. 7): 14 signatures in minuscule as compared to 43 in capital letters. If we apply the system that will be explained below, the percentage of spelling mistakes is 32.55% in the signatures in capital letters but only 21.42% in those in minuscule. However, in the Koutloumousi document of 1012 (*Kutlumus*, no. 1) the two percentages are similar to each other, but the sample available is very poor: two signatures in minuscule (mistakes 34.2%) and five in capitals (mistakes 30%).

<sup>15</sup> N. Wilson, "Scholarly Hands of the Middle Byzantine Period," *La paléographie*, 221–39, made the interesting remark that

limit my study to spelling, which is a secure and easily quantifiable criterion.

Were the Byzantines interested in correct spelling? One may at times wonder, especially when faced with manuscripts or documents that are literally riddled with errors. Yet these documents show an obvious lack of competence, and not by any means a lack of interest. In a milieu that was so much impressed with and inspired by the ancient classical authors, a profound knowledge of grammar and correct spelling is frequently extolled. I list some specific examples from the ninth to the fifteenth century, the period that concerns us here.

- 1. Around the year 800 Theodore, higoumenos of the monastery of Stoudiou with its famous scriptorium, wrote a letter to one of his monks, Naukratios, asking him to fight for orthodoxy, improve his handwriting, and learn his grammar; <sup>16</sup> obviously Naukratios was an apprentice scribe, for whom a good knowledge of grammar was necessary in order to avoid copying errors.
- 2. In the first half of the ninth century the biographer of Theophanes the Confessor wrote that his uneducated hero entered the monastery and for six years (ca. 781 to ca. 786) was taught calligraphy in order to become a scribe: "he did so well that he learned all the necessary and accumulated experience and [he was able to write] without any mistake in spelling as well as in the use of accents."<sup>17</sup>
- 3. The biographer of Symeon the New Theologian describes the stages of his hero's education: Symeon had become a scribe and had learned to write quickly and beautifully, but when asked to "improve his Greek through the study of pagan education" and learn some rhetoric, he chose not to persist much in these vain studies and limited himself to so-called grammar." <sup>18</sup> The knowledge of grammar thus appears as an indispensable ele-

the handwriting of scholars, especially after the 11th century, is very close to the notarial script that we know from imperial as well as private documents of the same period, undoubtedly because of the profession that most scholars had to exercise in order to make a living.

<sup>16</sup> PG 99, col. 1084.

<sup>&</sup>lt;sup>17</sup>B. Latyšev, "Methodii patriarchae Constantinopolitani, Vita Sancti Theophanis Confessoris," Mémoires de l'Académie des Sciences de Russie, VIIIe série, Classe hist.-philo., 13/4 (1918), 16: μαθείν τὸ δέον καὶ ἐμπειρίαν προσκτήσασθαι ἐπί τε τόνου καὶ γραφής ἀπαρόλισθα.

<sup>18 1.</sup> Hausherr, Vie de Syméon le Nouveau théologien par Nicétas Stéthatos (Rome, 1928), 2-4: τὰ τῶν ταχυγράφων . . . κατωρθωκώς, ὡραῖα γράφειν λίαν μεμάθηκεν . . . ἐλείπετο δὲ αὐτῷ ἐξελληνισθῆναι τὴν γλῶτταν τῆ ἀναλήψει παιδείας τῆς θύραθεν . . . μόνην μεμαθηκὼς τὴν οὕτω λεγομένην γραμματικήν. . . .

ment of the culture of a tenth-century man, even for a profound mystic like Symeon.

- 4. In the first half of the eleventh century we find the case of a judicial decision, the authenticity of which had been contested because in the signature the word Hellas was written with a smooth breathing. Eustathios Rhomaios, who examined the case, ruled that this was not sufficient grounds for rejecting the decision because such a mistake could well be due to a moment's distraction. <sup>19</sup> Correctness was definitely expected in the spelling of educated individuals.
- 5. The same notion occurs in John Zonaras who denounced the unacceptable lack of culture of the logothete John, who had lived under Constantine Monomachos in the middle of the eleventh century: "he was a eunuch so poorly trained in grammar that he was neither able to speak correctly nor to write without any spelling errors."<sup>20</sup>
- 6. Michael Psellos also attributed considerable importance to accuracy<sup>21</sup> and consistency<sup>22</sup> in spelling.
- 7. Michael Glykas, who lived in the fourteenth century, accuses the eighth-century patriarch Niketas of mistakenly adding a diaeresis above the diphthong αι.<sup>23</sup>

After reviewing these texts, it seems quite natural that, in the fifteenth century, John Argyropoulos should accuse one of his contemporaries of making mistakes in accents and in the spelling of conditional verb forms.<sup>24</sup>

The Greek language is very treacherous for those who write it, especially for Greek speakers or those who use its modern pronunciation. As if to draw a clear distinction between classical times and authors and what followed, the pronunciation of Greek changed radically after the second century, at the same time that the prosodic intonation (based on long and short vowels) was being replaced by the tonic one (based on stressed syllables). Spelling remained unchanged and had to be strictly respected because it reflected what the revered ancient authors had written; but the

sound of the language had changed substantially. When this process was complete, undoubtedly before the tenth century, Greek speakers were left with six ways of writing  $\iota$  ( $\iota$ ,  $\eta$ ,  $\upsilon$ ,  $\epsilon\iota$ ,  $\iota$ ,  $\iota$ );<sup>25</sup>  $\alpha\iota$ expressed the same sound as  $\varepsilon$ , and  $\omega$  the same sound as o; in some diphthongs, v was pronounced as  $\phi$  or  $\beta$ ; double consonants, deemed necessary for etymological reasons, were (and are) pronounced as if they were single consonants. Moreover, three different accents—the acute, the grave, and the circumflex—initially invented in order to differentiate the pronunciation of various words, ended by being pronounced in the same way, as a mere stress. The rules that governed their use depended on the historic value of the vowels: were they long or short? No one could know for sure, unless he had learned his grammar and etymology. The two breathings—rough and smooth—used with words beginning with a vowel, had only etymological significance and were not pronounced. One can easily imagine how many opportunities there were for Greek speakers to make spelling errors when writing a language in which pronunciation was of little help in determining the spelling.

Learning to write correctly had become a very difficult business—and still is in Modern Greek, in spite of the simplifications recently introduced. Byzantine schoolmasters used many means to help their students learn to spell, but nothing could save their young charges from the traps that their language prepared for them whenever they took up their pens. Spelling mistakes thus occur frequently in medieval manuscripts.

When trying to identify them, one must always be aware of peculiarities that prevailed, sometimes due to false etymologies. In Byzantine documents, April, 'Απρίλλιος, is spelled with a double lambda; this must be considered a standard, "correct" spelling. The name of the monastery of Vatopedi, Βατοπέδιον, from βάτος and πεδίον, means roughly "the bushy plain" and should be spelled with an epsilon; but a legend that developed at Vatopedi related the monastery's name to a child, παιδίον, that had supposedly been miraculously found in a bush. Therefore, a second spelling, Βατοπαίδιον, was prevalent, which, although etymo-

<sup>&</sup>lt;sup>19</sup>Peira of Eustathios Rhomaios, 64.6, in Zepos, Jus, IV.

<sup>&</sup>lt;sup>20</sup> Ioannes Zonaras, Bonn ed., III, 649: γραμματικής δὲ τέχνης τοσούτον μετεσχηκώς ὥστε μητ' ὀρθοεπείν ἀκριβώς, μήτ' ἀπταίστως ὀρθογραφείν.

<sup>&</sup>lt;sup>21</sup>C. Sathas, Μεσαιωνική Βιβλιοθήκη, V (Venice, 1876), 185.
<sup>22</sup> Sathas, ibid., 199; the passage has been commented upon by G. Spadaro, "I termini ὁξύρυγχος e στρογγύλος in un testo del sec. XI," RSBN 14-16 (1977-79), 130.

<sup>&</sup>lt;sup>23</sup> Michael Glykas, Bonn ed., 527–28; cf. the synopsis of Sathas, in Μεσαιωνική Βιβλιοθήκη, VI (Venice, 1877), 125, lines 13–30.

<sup>&</sup>lt;sup>24</sup>S. Lampros, 'Αργυροπούλεια (Athens, 1910), 85, lines 22–24.

 $<sup>^{25}</sup>$  It seems that ot and v were the last to be pronounced as a plain iota; most probably they were still pronounced like a German  $\ddot{u}$  and for this reason they are often confused on inscriptions of the 9th and 10th centuries. The Byzantine pronunciation of the words has also been studied through medieval translations into other languages, such as the Georgian; see, e.g., Neli A. Macharadse, "Zur Lautung der griechischen Sprache der byzantinischen Zeit,"  $J\ddot{O}B$  29 (1980), 145–58.

logically wrong, was nonetheless standard and acceptable. There are other similar cases which have never been listed properly and which one learns only by experience.

How to proceed after having established these premises? I took the documents, one by one. First, I counted separately the cases of illiterate representatives. Then, for each autograph signature, I counted how many syllables it contained in which a spelling mistake could be made. For example, in the name Νικόλαος, there are three possible pitfalls: the iota, which could be written in six different ways, and the two omicrons, which could be written either with omicron or with omega. The alpha presents no problem because there is only one way to write it. In a long signature (not counting abbreviations) one may easily find ten, twenty, or more syllables in which spelling is not dictated by pronunciation. I counted the actual spelling mistakes contained in each signature and then calculated the percentage of actual mistakes in relation to potential mistakes. For example, in a document of the protos Nikephoros of 1081 (Xeropotamou, no. 6), I counted 279 syllables (again excluding abbreviated syllables, since the signatory did not have to make a decision on spelling) that could potentially contain spelling mistakes; only 70 actual mistakes were made, which means the percentage was 25.09%. This method results in a slight deformation since at times there are actual mistakes in places where they should be impossible or at least far-fetched: for example, the signatory may introduce a double consonant in a place where the correct spelling calls for only one. I counted these errors as actual mistakes because these instances are few and consequently do not substantially alter the overall impression.

Then there are the accents and breathings. One should normally count them separately because they are subject to two kinds of mistakes: omission and use of the wrong accent or breathing. As these signs were not always supposed to be used with the capital script, their omission occurred—and still occurs today—quite often and in highly varying percentages at different periods of time. For this reason I decided, for the time being, not to include them in my count.

It is obvious that in applying this method of counting mistakes, especially in disregarding accent marks and breathings, one must make some rather arbitrary decisions. What does one consider a mistake and what an accepted spelling of a particular time? When does one give the scribe the

"benefit of the doubt" and when not? I am certain that if someone else examined the same documents that I did, with the same guidelines, he would end up with results that varied from mine. But I am sure that the *statistical* result of his count would be quite close to what I present below.

Before discussing my general results, I would like to remark on the distribution of the faulty signatures in each document. The first signatures almost always have few mistakes (often none), while the last ones in any given list are sometimes very poor (up to 50% mistakes, not even counting accent marks or breathings). This observation, if studied more closely, might have some importance for understanding the recruitment patterns of the various monasteries and the social discrimination that may have existed. For the time being one can safely say that the signatures at the top of the list are normally those of the protos and the representatives of the major monasteries, who were chosen from a large number of monks and had a greater chance of being better educated. We shall later see that this observation is unexpectedly confirmed by a comparison of the Protaton documents with those drafted and signed within some of the large monasteries. It is clear that these nuances, which I merely mention here, should be examined more closely and with the aid of computers.

One must also take into account some additional parameters when evaluating the level of literacy attested in a document or in many documents.

- (a) The number of signatures contained in each document; the working hypothesis is that a large number of signatories must include those at the bottom of the hierarchy and consequently must receive a poor score as far as the level of literacy is concerned.
- (b) The length of the formulae used in the signatures: only two or three words or a line or more? One assumes that even a poorly educated person can learn to reproduce more or less correctly the spelling of two or three words (his name and that of his monastery), while such accuracy is much more difficult for phrases that summarize the contents of the act, which would vary from one document to the next and would contain greater potential for making spelling mistakes.

These peculiarities, as well as mere chance, may give results that sometimes seem erratic. One may find impeccable documents, because these particular (and usually few) witnesses happened to have all received good educations; one semiliterate person, who makes many mistakes, may substantially

modify the score of his better educated fellow witnesses; and so on. One must be resigned to this and trust in the large numbers, which are bound to provide more reliable results.

These principles, and many grueling hours, resulted in the following table, which is supported by the documentation included in the Appendix to this article. As the number of extant acts is limited and as all these considerations are valid only if they have some statistical significance, I have been obliged to create clusters of documents according to chronological criteria: I grouped documents roughly by half centuries. This, of course, is arbitrary but also practical, because it happens to accommodate small gaps in the existing documentation. There is one major and obvious hiatus in the twelfth century (only one document of 1169, which I list on a line separate from the previous cluster, 1057-1107) and in the first half of the thirteenth. Then I made groupings suggested by the history of the Athonite region: documents written and signed prior to the civil wars (1257–1316), during the civil wars and the Serbian domination (1324-69), and during the Ottoman expansion (1371–1430). My divisions are arbitrary because they are based on criteria unrelated to cultural evolution and because the repercussions of historical events on the level of culture should appear only after a considerable delay (see below). But as any evaluation of this "delay" would have to be equally if not more arbitrary, I decided to keep to the historical divisions after warning the reader about the shortcomings of this methodology. The last line of the table, in italics, contains the same information but from post-Byzantine documents: the sample is small, thus its statistical value is limited.

The upper half of the table concerns the documents of the Protaton, which constitute the primary focus of the present research. In the first column are the beginning and ending dates of each cluster of documents; in the second, the absolute number of signatures that have been taken into account for this period; in the third, the average number of signatures per document, a figure that twice sharply declines (eleventh and fourteenth centuries) and allows one to judge the relative length of the lists of signatures; in the fourth, the average number of potential mistakes per signature, which allows one to judge the relative "spelling difficulty" of the formulae used in the signatures (note the rise in relative difficulty in the thirteenth century). The fifth column lists the percentage of actual spelling mistakes in relation to potential mistakes in each cluster of signatures (with the absolute numbers in parentheses); the sixth column lists the percentage of illiterates (again with the absolute numbers in parentheses).

The lower half of the table contains similar information from the few documents that are signed by a significant number of monks of individual monasteries. Six documents from 1001–44 constitute a cluster comparable to one of the Protaton clusters. For the remainder there are some isolated documents with no statistical value. These are listed in italics as comparative material.

As there is no similar study on a different region or time period, it is impossible to say with certainty whether the observations based on this table should be considered to have general value or if they reflect conditions that are peculiar to Mount Athos and its history. This is the obvious weakness of what follows, but one has to start somewhere. It

Dates	Number of signatures	Average sig./doc.	Average mistakes/sig.	Spelling mistakes	Illiterates
Protaton docu	ıments				
972–998 1012–48 1057–1107 [ <i>1057–1169</i> 1257–1316 1324–69 1371–1430	126 267 132 <i>157</i> 185 187	31.50 20.53 13.20 14.00 13.21 8.90 6.52	908:126 = 7.20 $1,940:267 = 7.26$ $1,030:132 = 7.80$ $1,221:157 = 7.77$ $2,198:185 = 11.88$ $2,485:187 = 13.28$ $2,104:163 = 12.90$	13.43% (908/122) 14.27% (1,940/277) 20.09% (1,030/207) 19.90% (1,221/243) 4.95% (2,198/109) 3.58% (2,485/89) 7.65% (2,104/161)	3.17% (4) 1.87% (5) 20.45% (27) 18.83% (29)]
	38 c or intramonastic 66 11 9	6.33 documents 11 11 9	461:38 = 12.13 731:66 = 11.07 148:11 = 13.45 107:9 = 11.88	10.84% (461/50) 15.59% (731/114) 2.02% (148/3) 0.87% (107/1)	13.15% (5) 4.54% (3)

is hoped that further studies of this nature will modify and improve what is proposed here.

One notes immediately that there is an obvious deterioration in the level of literacy from the tenth to the late eleventh century, especially during the second half of the eleventh. The percentage of illiterate participants, as well as that of spelling mistakes, rises sharply between 972 and 1089.<sup>26</sup> I have no explanation for this change other than a certain "popularization" of Mount Athos and, probably, a decline in the standard of living in Macedonia as a whole, related to the destruction associated with the Bulgarian wars of Basil II.

Essentially the same trends appear in the intermonastic documents of the short period from 1001-44. But here other criteria should be taken into account. For example, Iviron, with the worst score, was a non-Greek-speaking institution; Vatopedi and Esphigmenou, although Greek speaking, could not by any means lay claim to the importance and social attraction that the Megiste Lavra of St. Athanasios enjoyed. If one compares the average results of this group of documents with the chronologically corresponding cluster from the Protaton, one concludes that the level of the intramonastic signatories is similar to that of the Karyes representatives. Similar conclusions can be drawn from the isolated—and consequently less significant—intramonastic documents of the fourteenth and fifteenth centuries that are extant and that attest to a cultural level well above the average based on the Protaton documents of the same period.

Let us return to the main group of documents. As in all Byzantine diplomatics, there is an inexplicable gap of archival documentation from the beginning of the twelfth to the second half of the thirteenth century. The one document that is available, of 1169, seems to show that the level of Athonite literacy remained fairly stable. Unfortunately this is an isolated document.

It is also clear that between the middle of the twelfth and the middle of the thirteenth centuries (before 1257) a major and very significant change occurred. The documents extant from the second half of the thirteenth century attest an excellent, and constantly improving, level of literacy from all points of view. The number of illiterate representatives declines to virtually zero. Moreover, this coincides with a period of longer signatures, which may result from increased confidence on the part

There may have been a second reason for this improvement in the level of literacy: the kind of recruitment of monks that the Athonite community could afford in the thirteenth century. The major monastic centers of Asia Minor, such as Bithynian Olympus and Mount Latros near Miletus, had by then irremediably declined for a variety of reasons, including repeated Turkish attacks. Mount Athos remained the empire's only major monastic center. Moreover, because of the Fourth Crusade, the large and famous imperial monasteries of Constantinople were lost to the Latins without being replaced by the imperial foundations of the Empire of Nicaea. Mount Athos thus became a major pole of attraction for all who wanted to attain a high level of spiritual life in a desert environment. And it has retained this uniqueness ever since. One can thus understand why the monastic peninsula may by then have attracted monks of a higher calibre from the social as well as from the cultural point of view: not only will the Athonites soon become the main champions of hesychasm, not only will they preserve libraries recognized in the fifteenth century to be better than those of Constantinople,<sup>27</sup> but they will also become the main partisans of the aristocrat John Kantakouzenos in the fourteenth century. This situation, together with the rise in the cultural level, may explain the fact that from the cultural point of view

of better-educated monks. Unfortunately there are no sources that would allow us to track the developments of this important change. Thus one is limited to formulating hypotheses. The educational practice in Byzantium during this same period shows other signs of progress: "secondary" schools, which in the tenth century seem to have been the privilege of residents of Constantinople, appeared in other cities of the empire; the patriarchate finally obtained its own educational institution, the patriarchal school; the well-born, including the Komnenoi and the Bryennioi, were interested in letters, so that the cultivated noble became the rule rather than the exception. In this context the trends must have filtered down to the general population; one may easily understand why elementary education throughout the empire may have improved, especially since, after the Fourth Crusade, it was mainly limited to Greekspeaking regions.

<sup>&</sup>lt;sup>26</sup>There are no illiterate signatories in the document of 1107, but it is signed by only three people.

<sup>&</sup>lt;sup>27</sup>V. Laurent, Les "Mémoires" du Grand Ecclésiarque de l'Eglise de Constantinople Sylvestre Syropoulos sur le Concile de Florence (Rome, 1971), 170, line 20.

(as from many others) Byzantine Mount Athos seems to have reached its peak in the fourteenth century.

This peak appears in the first half of that century (one should note, though, that in this period the average number of signatures per document drops sharply); the high cultural level of the century is reflected in the reasonably good literacy of the monks. But this changes in a pronounced way as a result of the wars of the fourteenth century, particularly with the Turkish conquest of the European territories. As I noted earlier, the results of these events are reflected in the lists of signatures only after a certain delay, perhaps of one to one and a half generations: this is because what we are measuring is basic education, which a future monk would receive—or be denied—in childhood or adolescence, between the ages of six and sixteen, while his entrance into the monastery and his appointment as a representative could come only several years later, say, thirty years after his formative period. Thus the documents of the period 1371– 1430, in spite of the small number of Greek signatures that they contain (many Slavs now participate in the council of Karyes), show a sharp decline in the level of literacy. This could well be the result of the troubled times of the middle of the century (the Serbian conquests and the civil war of Kantakouzenos) and, even more, of the Turkish onslaught on Macedonia, first in the form of raids, then after 1383 in the form of real conquest. The situation becomes much more critical from the cultural point of view in the last period studied, that is, in the small cluster of documents from 1471-96. The percentage of spelling mistakes goes up considerably and sets the stage for the sixteenthcentury documents which constitute the extreme in faulty spellings. More important, in the second half of the fifteenth century, and for the first time since the twelfth, there are many completely illiterate representatives. The situation was certainly very serious: in this period the chancery of the Protaton more and more often has the scribe write all the names of the council members present without asking them to sign documents themselves.28 It is clear that the Byzantine educational system was by then in total disarray and that the monks of Mount Athos, together with all the zimmi of the Ottoman Empire, were once again entering the Dark Ages, at the very time when a few selected Byzantine scholars, who had fled to the West, were participating in the development of the Italian Renaissance.

So far as I know, the question of literacy has not yet been asked in these terms for Byzantium. Studies of a similar nature have been done for West European nations, especially for the post-Renaissance period.<sup>29</sup> There as well the signature has been considered the most revealing indication of literacy. The percentage of completely illiterate individuals is sometimes astonishing and in any case well beyond whatever could be imagined in a Byzantine milieu. But as the rules of spelling were not yet definitely established in seventeenthcentury Europe, no efforts have been made to calculate the degree and level of literacy of the various signatories and groups of signatories. Only a classical language, with the special problems of medieval Greek, could permit the approach that I have taken here. But even if one limits his attention to the distinction between literate and completely illiterate individuals, as is done in the works referred to, one sees that the Byzantines appear to be far more literate than their West European counterparts.

The results that have been proposed here should be considered provisional since we are still not in a position to distinguish between what is general and what has only local significance. It is obvious that further, more systematic, nuanced, and in-depth research aided by computers must be done before we can claim more solidity for our conclusions, which will then become more valuable for the historian. The same method can be applied to other types of documents: the private deeds of the tenth-fifteenth centuries from all the areas where monasteries with extant archives had acquired property, inscriptions, seals, annotations in the margins of medieval manuscripts, and any source that is preserved in its original form and that can be located geographically inside Byzantium and dated with some precision. In these future studies the results obtained from the Athonite

<sup>&</sup>lt;sup>29</sup> Among recent publications one may selectively cite those mentioned, note 3, and R. S. Schofield, "The Measurement of Literacy in Pre-Industrial England," in *Literacy in Traditional Societies*, ed. J. Goody (Cambridge, 1968); Fr. Furet and J. Ozouf, *Lire et écrire: L'alphabétisation des Français de Calvin à Jules Ferry*, 2 vols. (Paris, 1977); H. Graff, *The Literacy Myth: Literacy and Social Structure in the Nineteenth-Century City* (Academy Press, 1979); R. Scribner, "How Many Could Read?" *Stadtbürgertum und Adel in der Reformation* (London, 1979); D. Cressy, *Literacy and the Social Order: Reading and Writing in Tudor and Stuart England* (Cambridge, 1980); *Literacy in Historical Perspective*, ed. D. Resnik (Washington, D.C., 1983).

documents, which are more numerous and more concentrated than any others, could serve as a measuring stick, useful for comparing the spelling "scores" prevailing in signatures at a particular time and place. The position of Mount Athos in everyday cultural life in Byzantium could thus be better assessed. And by a detailed study of this nature one might hope to end by developing "literacy maps" of Byzantium throughout the centuries.

There are potentially other areas in which the same approach could provide objective answers to vexing questions. For example, more detailed studies can be done in order to distinguish, on the basis of their mistakes, between Greek speakers

and non-Greek speakers who wrote in Greek. Questions such as the mother tongue of famous artists and artistic schools, for example, the much disputed Macedonian school of painting, might thus receive more scholarly and less emotional answers. Such studies might draw conclusions that are more far-reaching and provocative than the present limited study, the purpose of which was to test the method and to provide a quick sketch of rank-and-file Greek literacy on Mount Athos during the Byzantine period.

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APPENDIX

Chronological List of the Protaton Documents Studied

Date	Reference	Number of signatures	% of illiterates	% of spelling mistakes
972	Prôtaton 7	57		10.40
985 Jan.	Iviron 7	23		8.31
991 Nov.	Lavra 9	17	17.64	12.38
998 Sep.	Vatopedi, unpub.	29	3.44	22.66
1012 Apr.	Lavra I, 17	15		17.47
1012 July	Kutlumus 1	7		31.47
1013 Apr.	Iviron 18	21		14.07
1015 Apr.	Iviron 20	39	2.50	16.11
1016 Feb.	Lavra I, 19	21		15.90
1018 Apr.	Vatopedi, unpub.	32		13.14
1018 Dec.	Vatopedi, unpub.	35		9.83
1020 Dec.	Iviron 24	22	4.54	14.72
1024 Feb.	Lavra I, 25	13		8.42
1035 Apr.	Lavra I, 29	23	4.30	11.76
1037 Apr.	Lavra I, 30	7		8.33
1040/41	Esphigmenou 3	8		9.52
1048 May	Panteleemôn 4	24	8.33	14.76
1057 May	Panteleemôn 5	23	13.04	15.04
1059 Apr.	Vatopedi unpub.	17	23.52	14.66
1066 Apr.	Vatopedi unpub.	11	18.18	19.31
1070 Nov.	Panteleemôn 🖯	11	27.27	8.95
1071 May	Vatopedi <sup>30</sup>	16	12.50	23.77
1076 Jan.	Mošin-Sovre 1	19	26.31	15.78
1080 Oct.	Schatzkammern 104	8	12.50	22.63
1081 Apr.	Xéropotamou 6	17	35.88	25.09
1089 July	Xénophon 1	731	14.28	18.18
1107 Nov.	Pantocrator 1	3	- 1.40	9.09
1169 Aug.	Panteleemôn 8	22	9.09	18.84
1257 Dec.	Kutlumus 2	8		3.81
1262 Jan.	Docheiariou 7	9		2.43
1287 Feb.	Kutlumus 3	11		2.43

<sup>30</sup>Cf. Nέος Έλλ. 9 (1912), 218-19.

<sup>&</sup>lt;sup>31</sup>In this document I did not take into account the signatures of lines 207–12, which all seem to be written by the same hand.

		Number	% of	% of
Date	Reference	of signatures	illiterates	spelling mistakes
1287 Aug.	Lavra II, 79	2332		5.79
1288 Aug.	Chilandar 10	$20^{33}$		5.97
1294 Nov.	Chilandar 9 A <sup>34</sup>	6		1.89
	Chilandar 9 B	13		5.76
1306 Apr.	Schatzkammern 105	11		2.58
1310 Nov.	Kastamonitou 2	10		4.29
1312 Mar.	Docheiariou 12	5		
1313	Kutlumus 9	19		7.96
1314 June	Xéropotamou 17	8		1.78
1316 May	Xénophon 11	9		2.60
1316 May	Esphigmenou 12	35		7.12
1324 Feb.	Schatzkammern 106	3		
1325 Sep.	Kutlumus 12	13		7.02
1325 ca.	Chilandar 111	5		7.04
1329 Sep.	Kutlumus 15	14		9.83
1331 Apr.	Xéropotamou 24	7		3.38
1333 July	Kastamonitou 4	7		
1345 June	Docheiariou 24	5		1.13
1353 Apr.	Lavra III, 133	4		8.77
1356 Dec.	Zographou <sup>35</sup>	5		2.63
1362 Oct.	Kastamonitou 5	5		8.42
1364 Oct.	Chilandar 148	10		3.00
1366 Nov.	Chilandar 152	13		2.70
1369 Feb.	Kutlumus 25	11		4.48
1369 July	Vatopedi unpub.	7		3.92
1369 Nov.	Kutlumus 27 <sup>36</sup>	6		3.27
1369 Dec.	Kutlumus 28	11		1.85
1371 Jan.	Xénophon 31	5		1.06
1371 June	Vatopedi unpub.	6		10.29
1375 Jan.	Vatopedi unpub.	7		16.21
1376 Sep.	Vatopedi unpub.	4		3.70
1377 July	Vatopedi unpub.	8		9.87
1377 Sep.	Vatopedi unpub.	7		3.44
1378 July	Docheiariou 46	7		0.11
1378 July	Kutlumus 36	6		2.16
1387 Aug.	Kutlumus 39	7		2.85
1392 Dec.	Chilandar 160	6		4.00
1394 Nov.	Dionysiou 7	$\overset{\circ}{9}$		11.11
1395 Oct.	Pantocrator unpub.	4		2.59
1398 June	Kutlumus 42	8		15.27
1398 Sep.	Vatopedi unpub.	7		13.09
1400 Jan.	Dionysiou 9	7		5.12
1405 July	Lavra III, 155	10		10.41

<sup>32</sup>The autograph signatures are followed here by nine *signa*, which cannot by any means indicate that all these monks were illiterate (cf. above, note 9); for this reason I disregarded them.

<sup>&</sup>lt;sup>33</sup>I disregarded one illegible signature.

<sup>&</sup>lt;sup>34</sup>This document is preserved in two originals. The first (A) has only six autograph signatures and many signa which I disregarded because many of these monks wrote their signatures on the second original (B), which bears 16 autograph signatures and no signa. I treated the two originals separately. It should be noted that the document with the small number of signatures also has very few mistakes, while the second one, B, has what appears to be a "normal" percentage of orthographical errors for this period.

<sup>35</sup>L. Μαντοππατίs, Μεσαιωνικό ἀρχεῖο μονής Ζωγράφου: Ἔγγραφο πρώτου Δωροθέου, ᾿Αφιέρωμα στὸν Νῖκο Σβορῶνο, Ι (Rethymnon, 1986), 316 and pl.

<sup>&</sup>lt;sup>36</sup>This document and the following one have several common signatories. One should note that one of them, Theophilos Plakas, made one spelling mistake in his signature of November but wrote an impeccable, although longer, signature in December. This betrays his lack of certainty insofar as spelling was concerned. Cf. above, note 10.

Date	Reference	Number of signatures	% of illiterates	% of spelling mistakes
1405 Aug.	Kutlumus 43	8		6.1737
1406 Aug.	Vatopedi unpub.	6		8.53
1407 July	Vatopedi unpub.	$5^{38}$		7.04
1409 Nov.	St. Paul unpub.	9		18.58
1423 May	St. Paul unpub.	9		5.37
1427 Nov.	Dionysiou 23	6		11.82
1430 Jan.	Dionysiou 24	4		6.38
1430 Jan.	Panteleemôn 20	4		11.76
1471 Apr.	Kastamonitou 7	10		9.09
1483 June	Kastamonitou, App. III	5		1.61
1494–96	Dionysiou 37	5		11.76
1494-96	Dionysiou 38	5 2 6		4.54
1496 May	Docheiariou 56	6		12.65
1496 May	Dionysiou 39	10		19.38
	Some intermonastic or intr	amonastic docum	ents with signat	ures
1001 Dec.	Vatopedi <sup>39</sup>	15	13.33	18.92
1012 Mar.	Lavra I, 16	17		8.71
1030 Mar.	Lavra I, 27	15		10.16
1036 Nov.	Iviron 25	4	25.00	21.95
1037 Dec.	Esphigmenou 2	4		14.58
1044 July	Iviron 28	11		23.14
1316 May	Esphigmenou 13	11		2.02
1419 May	Iviron unpub.	9		0.87

<sup>&</sup>lt;sup>37</sup>It should be noted here that 4 out of a total of 5 spelling mistakes occur in the signature of the representative of the Rossikon (line 25); if these mistakes were not counted, the percentage of mistakes would fall to 1.23%.

<sup>&</sup>lt;sup>38</sup>I did not take into account the last four lines of signatures on this document, which were all written by the same hand.

 $<sup>^{39}</sup>$ M. Goudas, Buζαντιακὰ ἔγγραφα τῆς ἐν Ἅθφ ἱερᾶς μονῆς τοῦ Βατοπεδίου, Ἐπ. Ἑτ. Βυζ. Σπ. 3 (1926), 117–19, no. 1.